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CLAIMS

1. A method of treating an aluminum-wheel surface, the method comprising a blasting process for blowing a casting material onto the aluminum-wheel surface wherein the casting material is composed of plastic particles ranging in size from 100 to 2000 μm and containing a thermosetting resin as the main ingredient.

2. The method in accordance with claim 1, further comprising a chemical conversion process not using hexavalent chromium after the blasting process.

3. The method in accordance with claim 2, the method being applied to an aluminum wheel having a mold release agent adhered to the surface of the aluminum wheel and further comprising a washing process between the blasting process and the chemical conversion process.

4. The method in accordance with claim 1, the method being applied to an aluminum wheel the surface of which is coated with a coating.

5. The method in accordance with claim 4, wherein the blasting process is conducted more than once by changing the

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diameter and/or hardness of the plastic particles.

6. The method in accordance with claim 4 or 5, further comprising a solvent-treating process using a solvent.

7. The method in accordance with any one of claims 4 to 6, further comprising a blasting process using a metal casting material.

8. The method in accordance with any one of claims 1 to 7, wherein the casting material is collected after the blasting and is circulated for repeated use thereof.

9. The method in accordance with any one of claims 1 to 8, wherein an air-blasting device is used.

10. The method in accordance with any one of claims 1 to 9, wherein the plastic particles are a pulverized thermoset resin having a particle size of 50 to 1000 μm , each particle is substantially an amorphous polyhedron having a sharp edge line, and the particle size of each particle size classification of the pulverized particles is roughly homogeneous.

11. The method in accordance with any one of claims 1 to

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10, wherein the blowing of the plastic particles involves the use of a nozzle having a diameter widening from the end of an inner throat toward the tip of an outlet at an extent angle θ of 0.5 to 1.5° in the longitudinal direction of the nozzle, and a ratio (B/A) of the length B between the end of the throat and the tip of the outlet to the diameter A of the throat is greater than or equal to 10.

12. An apparatus for treating an aluminum-wheel surface by blasting the aluminum-wheel surface with a casting material, the apparatus comprising:

a rotating shaft for fixing and rotating the aluminum wheel;

a nozzle positioned apart from the rotating shaft so as to face the rotating shaft in the axis direction thereof;

a rotating mechanism for controlling the rotation of the rotating shaft; and

a transferring mechanism for transferring the nozzle in a linear reciprocating motion in the radial direction of the aluminum wheel;

at least one of the rotating mechanism and the transferring mechanism being speed-controllable.